Dear EFEE members, the president’s voice

Springtime has arrived everywhere in Europe and we hope that you have been able to enjoy the first warm and sunny days.

We are sending you this first newsletter in 2014 to inform you about current events in the blasting sector and in our Federation.

The Board meetings in November 2013 in Bratislava covered the evaluation and conclusion of the 7th EFEE Conference in Moscow as a central point. We would like to use this opportunity to thank Alexander Efremovtsev from NOEE again as well as the sponsors and exhibitors of the Moscow conference whose commitment contributed quite considerably to the success of our conference.

Our spring board meeting in Rome was used to prepare for the Council Meeting and Annual General Meeting(AGM) which took place on the 3rd May 2014 in Dublin. As well as the election for the EFEE Board. Furthermore, preparations of the 8th EFEE Conference which will take place from 26th to 28th April 2015 in Lyon are going full speed. For further information please see the latest EFEE newsletter.

The result of the Dublin election during the 14th AGM means that the federation will be run by the following the next year:
As the past President I wish the new Board all the best for tackling all future tasks.
I would like to use this opportunity to thank all Board members for the very, very good and constructive cooperation during my two years as President. Despite all the work it was a very good time for me and so I leave from this position with mixed feelings. I am looking forward to continuing this good cooperation in the Board – now as the Past President.

Jörg Rennert, Past president of The EFEE board

Dear EFEE Members,

As the new president I step in to a row of past presidents big shoes. I am humble for the forthcoming tasks which I will do my best to solve in the interest of EFEE.

While speaking about past presidents I would like to use the opportunity to thank Jörg Rennert for his great contribution and steering of EFEE the past years, as its president. I know I am not alone when I say that he was the perfect match for the challenge EFEE faced in arranging the 7th EFEE conference in Moscow. Thank you Jörg; and I can tell you, that I as the new president am happy to still have you on my side in the new board.

The new board contains a good mix of skilled people whom will be of great use in the coming year. The board says goodbye to Alexander Efremovtsev, which has been part of the board the last couple of years. His main focus has been in preparation of the past EFEE conference in Moscow, which we as Jörg mentions earlier thank Alexander for. The new member of the Board is Vegard Olsen. Vegard have put a lot of energy in to EFEE the last few years, we welcome Vegard to the board and look forward to make use of your skills.
The next board meeting will be held in July 2014 in Amsterdam, Holland, where the conference location of the 9th EFEE conference in 2017 will be in focus (the 8th is to be held in Lyon 2015, see more in this Newsletter). In September 2014 follows the next EFEE Committee, Council and board meeting which is to be held in Tallinn, Estonia. Here the latest EFEE supported project ESSEM II will be in focus, read more in this Newsletter.

I wish you all a great summer and look forward to see as many of you for the next EFEE meetings and to inform you in the next Newsletter which will be sent out after the Meeting in Tallinn.

Johan Finsteen Gjødvad, President of The EFEE board

The former president Jörg Rennert and present president Johan Finsteen Gjødvad with the members of the board - Igor Kopal, Heinz Berger, Ricardo Chavez, Donald Jonson, Roger Holmberg and Vegard Olsen
25 Years of EFEE
A look at the past 25 years (1988 to 2013)

During the conference of the American Society of Explosives Engineers in 1988, now named ISEE, at Anaheim/California several colleagues from Europe met, among them Roger Holmberg and Walter Werner (Germany). The conference of the American Society of Explosives Engineers was good, even though the thought and idea was obvious; that the Europeans could manage something similar. Werner had earlier been in contact with several explosives specialists he had met at the international conferences at Linz/Austria and Budapest/Hungary.

W. Werner being the president of the German Blaster’s Association invited his colleagues to Aachen in West-Germany to establish a European institute of explosives engineers. Aachen was chosen by Werner because it was situated in the center of Middle-Europe close to the Netherlands and Belgium.

Different EFEE logos through time, the logo on the right is the present.
Five nations were present at October 20th, 1988 when EFEE was founded: Finland (Raimo Vuolio), the Netherlands (Henk Grünfeld and Joep Peeters), Switzerland (Didier Fardel and Hans Gysin), UK (Ken Broadhurst and Mike Groves) and Germany with nearly the complete board of the German association. Roger Holmberg, Sweden showed interest, but sent an apology as well as Austria. Both countries joined EFEE later.

After long discussions regarding the English name of the organization, with suggestions as “European Explosives Engineering Institute”, the name was finally decided to be the present name “European Federation of Explosives Engineers” (EFEE). The German name easily followed “Europäischer Sprengverband”, copying the German Blaster’s Association. Fortunately there was with Didier Fardel a French speaking colleague and the French name was found as “Fédération Européenne des Specialistes de Minage”. The difficulty with finding a suitable name was an indication of one of EFEE’s and EU’s future challenges in the big variety of languages.

The First and last page of the first minutes of an EFEE meeting, Aachen 1988
<table>
<thead>
<tr>
<th>Period</th>
<th>President</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>Walter Werner</td>
<td>Germany</td>
</tr>
<tr>
<td>1989</td>
<td>Ken Broadhurst</td>
<td>UK</td>
</tr>
<tr>
<td>1991</td>
<td>Henk Grünfeld</td>
<td>Netherlands</td>
</tr>
<tr>
<td>1992-1993</td>
<td>Hans Selenthaler</td>
<td>Switzerland</td>
</tr>
<tr>
<td>1993-1994</td>
<td>Björn Jonsson</td>
<td>Sweden</td>
</tr>
<tr>
<td>1994-1995</td>
<td>Herbert Holluba</td>
<td>Austria</td>
</tr>
<tr>
<td>1995-1996</td>
<td>Jürgen Schneider</td>
<td>Denmark</td>
</tr>
<tr>
<td>1997</td>
<td>Raimo Vuorio</td>
<td>Finland</td>
</tr>
<tr>
<td>1998-2000</td>
<td>Rolf Schillinger</td>
<td>Germany</td>
</tr>
<tr>
<td>2000-2002</td>
<td>Aslak Røvlo</td>
<td>Norway</td>
</tr>
<tr>
<td>2002-2003</td>
<td>Renny Müller</td>
<td>Switzerland</td>
</tr>
<tr>
<td>2003-2004</td>
<td>Heinz Berger</td>
<td>Austria</td>
</tr>
<tr>
<td>2005-2006</td>
<td>Mark Hatt</td>
<td>Switzerland</td>
</tr>
<tr>
<td>2007-2008</td>
<td>Roger Holmberg</td>
<td>Sweden</td>
</tr>
<tr>
<td>2008-2009</td>
<td>José Carlos Gots</td>
<td>Portugal</td>
</tr>
<tr>
<td>2010-2011</td>
<td>Donald Jonson</td>
<td>Sweden</td>
</tr>
<tr>
<td>2012-2013</td>
<td>Jörg Rennert</td>
<td>Germany</td>
</tr>
<tr>
<td>2014-</td>
<td>Johan Finsteen Gjødvad</td>
<td>Denmark</td>
</tr>
</tbody>
</table>

In May 1990 a first EFEE – conference was held in Brussels with, now counting 9 nations and more than 90 participants.

Proceedings and program, Symposium at Brussels April 1990.
Even though the next conference the 1st “EFEE World Conference on Explosives and Blasting Technique” was held in Munich with 16 member countries and 450 participants, the Brussels conference was an important event which lifted EFEE to a higher level. Between these first two conferences EFEE was developing through regular meetings all over Europe and through national conferences with international guests.

Since 2000 seven “EFEE World Conference on Explosives and Blasting Technique” has been held around Europe with increasingly success. The conferences are listed with year and location below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munich, Germany</td>
<td>2000</td>
</tr>
<tr>
<td>Prague, Czech Republic</td>
<td>2003</td>
</tr>
<tr>
<td>Brighton, United Kingdom</td>
<td>2005</td>
</tr>
<tr>
<td>Vienna, Austria</td>
<td>2007</td>
</tr>
<tr>
<td>Budapest, Hungary</td>
<td>2009</td>
</tr>
<tr>
<td>Lisbon, Portugal</td>
<td>2011</td>
</tr>
<tr>
<td>Moscow, Russia</td>
<td>2013</td>
</tr>
</tbody>
</table>

The location of the 8th and 9th “EFEE World Conference on Explosives and Blasting Technique” are already decided and will be held in 2015 and 2017. The planning is in full process and information about the 8th conference in Lyon can already now be found at EFEEs homepage www.efee.eu or the conference homepage http://www.efee2015.com/.

Council meetings have been held in numerous member countries and cities, ensuring the steady successful development of EFEE. Today EFEE has grown to a well-represented organization listing 25 member nations from Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Kasakhstan, Liechtenstein, Netherlands, Norway, Poland, Portugal, Russia, Slovenia, Slovak Republic, Spain, Sweden, Switzerland, UK and Ukraine, followed by 23 corporate members, 61 individual members and one associated member.

In between the conferences, council meetings and board meetings EFEE have initiated research projects, communicated with the authorities of European countries and EU on legislation and directives. Several EFEE Newsletter have been published over the years. Below are examples of the newsletter.
The latest initiative of EFEE is the ESSEM II project, which aims to further harmonize the education for work with explosives, elaborating at the past EFEE research project ESSEM I. The project application involves nine companies from seven European countries, and EFEE has applied for funding from ERASMUS +.

It is a great challenge to get a united Europe, but we owe it to future generations and the growth of EFEE to proof that it is worth the efforts. The newsletter congratulates EFEE for the successful 25 years, and hope for many more to come.

Saint Barbara we beg You:

“Good Luck, and continued success for EFEE“

Walter Werner, Germany and First EFEE President, Roger Holmberg Secretary General of EFEE and Johan Finsteen Gjødvad President of the board
Blasting the highest building in Europe
On February 2nd 2014 in Frankfurt (Germany) the highest sky scraper in Europe fell down by blast demolition.

With a mass of about 50,000 tons, a height over ground of about 117 m and a difficult neighbourhood, it was a big challenge for the demolition company AWR, the blasting company Reisch and the design engineer Dr. Melzer.

The basic principle of the blast demolition was a first vertical collapse of the skeleton part and a following folding of the core. The first vertical collapse was caused by blasting all columns in five floors. The three seconds later core folding completed the building drop down to an only 8 m high debris heap with a total length of about 100 m and a breadth of about 50 m.
The basic principle of the blast demolition was a first vertical collapse of the skeleton part and a following folding of the core. The first vertical collapse was caused by blasting all columns in five floors. The three seconds later core folding completed the building drop down to an only 8 m high debris heap with a total length of about 100 m and a breadth of about 50 m.

On the contrary in the blast mouth charges were placed about 400 electronic detonators. The three second time displacement was decided so that dropping slabs were sheltering the upper core blast mouth in its detonation yet. Water filled “big bags” on the roof should help to control the dust. To the blast a 250 m exclusion zone was established around the tower.
The predicted vibrations in the only 20 m neighboured subway tunnels were as 15 mm/s the same as finally measured. No damages or unexpected results of the blast were realised. The white building nearby the tower to see on the picture was used as shelter only and it was to demolish too.

Planungsbüro für Bauwerksabbruch|
Dr. Melzer, Dresden
Omsewitzer Höhe 7
01157|Dresden
Germany
dr.r.melzer@arcor.de
Status on the ESSEEM II project

In december 2013 there was an article in EFEE Newsletter about a new project for the ESSEEM - European Shotfirer Standard Education for Enhanced Mobility. Now, Viive Tuuna from Voglers Eesti, has finished with the application form under the Erasmus+ program as a Strategical Cooperation and presented it to the Archimedes bureau in Estonia. The results are expected to become public in August 2014.

The ESSEEM II project has 9 partners from different countries in Europe – Dresdner Sprengschule from Germany with Jörg Rennert, Norges Teknisk-Naturvitenskapelige Universitet from Norway with Vegard Olsen, Universidade de Coimbra from Portugal with Jose Carlos Gois, Institute of Explosive Engineers from England with Nigel Taylor, Spolecnost pro Trachi Techniku a Pyrotechniku from Czech Republic with Pavel Krivanek, Geoblast from Portugal with Antonio Galizia, Bergsprängnings Entreprenörernas Förening from Sweden with Jan Johansson, Egide Environnement from France with Anne Charline Sauvage, Kure-Fjellsprengningsteknikk from Norway with Karl Kure.

If the decision about the project will be positive, and the grant will be given by European Commission, there will be a lot of work to do in the following three years. To summarize shortly the most basic activities will be working with materials – adding examinations, exercises, tunnelling and creating a designed certificate; then making sure that the courses and learning materials will follow the principles and framework of ECVET – European Credit system for Vocational Education and Training; if materials are ready we start with seminars/courses to train first trainers for the ESSEEM II courses; finally there will also be a Guidebook for the future trainers to carry on with the courses, the Guidebook will ensure the quality of the courses, explain any added pictures or charts and help with frequently asked questions. The materials will be translated into German, French, Portuguese, Czech, Estonian, Norwegian and Swedish, according to the partner countries. As the new application form differs a lot from previous Leonardo da Vinci project, there was some changes to be made. The form was very technical, every piece of information was registered in internet which later will be used for check-ups. Some of the activities were modified to fit with the baseline of the application form, for example the seminars/courses. But eventually everything fitted and we hope for the best. And hereby big thanks to all the partners, as they stood by the coordinator and helped in any way, did not mind a phone call during weekend and few extra hours for checking the project with a fresh eye.

If there is anyone interested in being a trainer for ESSEEM and European Shotfirer Certificate, there will be a possibility to participate in these seminars/courses on the third year of the project. Then they should contact EFEE for more information and registration.

Viive Tuuna, CEO in Voglers Eesti
Rakvere, Estonia
New EFEE members
EFEE likes to welcome the following Members who recently have joined EFEE.

Company Members

**MDL, UK**

MDL, part of Renishaw plc, is a global pioneer and world leader in the design and manufacture of high speed laser measurement systems for use in extreme environments. MDL has been supplying the Quarry and Mining industry worldwide since 1983 and has an international network of offices, distributors, and service centers. MDL’s Quarryman® Pro 3D rock face laser profiler, Boretrak® borehole deviation probe, and associated blast design software have become industry standard tools within the Quarry industry for blast optimization, burden finding, and stockpile measurement. More details available at www.mdl.co.uk

**Impact Technologies GmbH, Germany**

Impact Technologies GmbH provide boiler explosive cleaning services in Europe under the name Impact Cleaning.

www.impact-cleaning.eu

Individual Members

**Stefan Orth**, Ontaris, Germany

**Günter Kleinrath**, Schaffler GmbH & Co KG, Austria

**Antonio Lozano**, Geoengineering Services & Consulting E.I.R.L., Peru

**Alexander Kravtsov**, Czech Technical University in Prague, Czech Republic
On Sunday 26 April 2015 the European Federation of Explosive Engineers will present its 8th World Conference on Explosives and Blasting at the Lyon Convention Centre, France.

The World Conferences on Explosives and Blasting is an excellent platform for becoming familiar with the current developments in the blasting technology sector. It is also an excellent arena for blasting technology experts from all over the world to extensively exchange their experiences.

The conference includes:
- Large Industry Exhibition
- Latest Innovations and Technology
- Technical Presentations
- Partner Leisure Programme
- Industry Specific Workshops

For further details visit www.efee2015.com
or email: info@efee2015.com
The art of successful blasting

INFRA monitoring system

VIBRATION  AIR BLAST  SOUND LEVEL  CRACK METERING
and more in one system

SIGICOM AB, ALFRED NOBEL'S ALLE 214, SE 146 48 TULLINGE SWEDEN
Phone +46 8 449 97 50, e-mail: info@sigicom.com, web: www.sigicom.com
Upcoming Events

Swiss Tunnel Congress 2014
11-13 June 2014
Luzern Switzerland
http://www.ita-aites.org/

2014 North American Tunneling Conference
June 22-25, 2014
Los Angeles, USA
http://www.smenet.org/page/index.cfm?id=913

15th Australian Tunnelling Conference, 2014
17-19 September 2014
Sydney, Australia
www.atstunnellingconference2014.com

Austria Tunnel day 8th October 2014, organized by ITA Austria - 63rd Geomechanics Colloquium
8 – 10 October 2014
Salzburg Austria
www.oegg.at

2015 ISEE
1-4 February,2015
New Orleans, USA
https://www.isee.org/

8th EFEE Conference on Explosives and Blasting
April 26-28, 2015
Lyon, France
www.efee2015.com

World Tunnel Congress 2015
May 22-18, 2015 Dubrovnik, Croatia
www.wtc15.com
Proceedings

A new release of the Proceedings from the 7th EFEE World Conference on Explosives & Blasting is now available. Contact simon@tylerevents.co.uk for sales price and shipping. He may also have a few extra of the earlier proceedings in stock.

<table>
<thead>
<tr>
<th>Conference</th>
<th>Where</th>
<th>Title</th>
<th>Editor</th>
<th>Contact for purchase</th>
<th>Publisher</th>
<th>Listed price ex freight</th>
<th>ISBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st EFEE World Conference on Explosives and Blasting</td>
<td>2000 Munich</td>
<td>Explosives and Blasting Technique</td>
<td>R. Holmberg</td>
<td>Taylor &amp; Francis Group Ltd Tel: +44 (0) 20 7017 6000</td>
<td>Balkema</td>
<td></td>
<td>ISBN: 9789058091680</td>
</tr>
<tr>
<td>2nd EFEE World Conference on Explosives and Blasting</td>
<td>2003 Prague</td>
<td>Explosives and Blasting Technique</td>
<td>R. Holmberg</td>
<td>Taylor &amp; Francis Group Ltd Tel: +44 (0) 20 7017 6001</td>
<td>Balkema</td>
<td></td>
<td>ISBN: 9789058096050</td>
</tr>
<tr>
<td>3rd EFEE World Conference on Explosives and Blasting</td>
<td>2005 Brighton</td>
<td>Third EFEE world conference on explosives and blasting</td>
<td>R. Holmberg et al</td>
<td><a href="mailto:simon@tylerevents.co.uk">simon@tylerevents.co.uk</a></td>
<td>EFEE</td>
<td>60 €</td>
<td>ISBN: 978-0-9550290-0-7</td>
</tr>
<tr>
<td>4th EFEE World Conference on Explosives and Blasting</td>
<td>2007 Vienna</td>
<td>Fourth EFEE world conference on explosives and blasting</td>
<td>P. Moser et al</td>
<td><a href="mailto:simon@tylerevents.co.uk">simon@tylerevents.co.uk</a></td>
<td>EFEE</td>
<td>60 €</td>
<td>ISBN: 978-0-9550290-1-1</td>
</tr>
<tr>
<td>5th EFEE World Conference on Explosives and Blasting</td>
<td>2009 Budapest</td>
<td>Fifth EFEE world conference on explosives and blasting</td>
<td>P. Moser et al</td>
<td><a href="mailto:simon@tylerevents.co.uk">simon@tylerevents.co.uk</a></td>
<td>EFEE</td>
<td>60 €</td>
<td>ISBN: 978-0-9550290-2-8</td>
</tr>
<tr>
<td>6th EFEE World Conference on Explosives and Blasting</td>
<td>2011 Lisbon</td>
<td>Sixth EFEE world conference on explosives and blasting</td>
<td>R. Holmberg et al</td>
<td><a href="mailto:simon@tylerevents.co.uk">simon@tylerevents.co.uk</a></td>
<td>EFEE</td>
<td>60 €</td>
<td>ISBN: 978-0-9550290-3-5</td>
</tr>
<tr>
<td>7th EFEE World Conference on Explosives and Blasting</td>
<td>2013 Moscow</td>
<td>7th EFEE world conference on explosives and blasting</td>
<td></td>
<td><a href="mailto:simon@tylerevents.co.uk">simon@tylerevents.co.uk</a></td>
<td>EFEE</td>
<td>60 €</td>
<td>ISBN: 978-5-98746-017-7</td>
</tr>
</tbody>
</table>